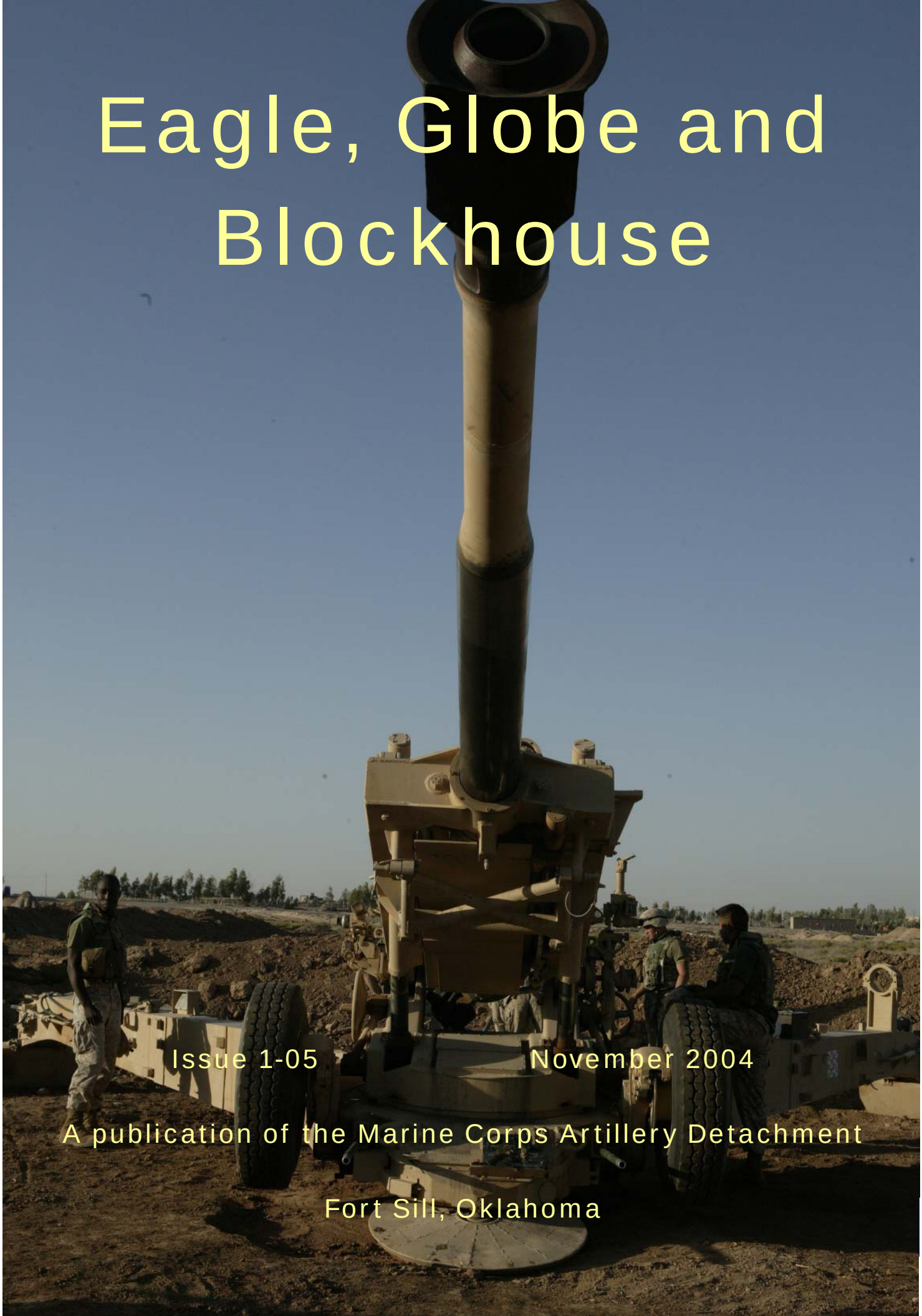

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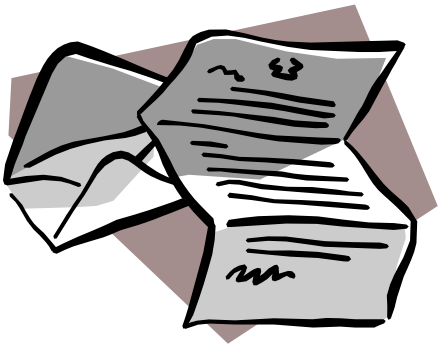

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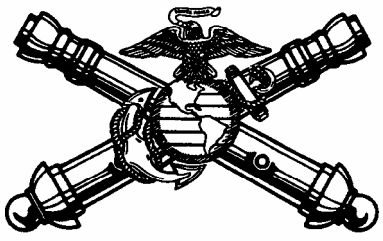
SCHOOL HOUSE UPDATE



AFATDS NETT
Updated list of Improvements for AFATDS Version 6.4

Over the past several months, Marines have been inquiring about the next version of software for AFATDS. Although the final material release date for v6.4 is still pending, the following list is provided for those interested in knowing what will be in the upcoming software v6.4 for AFATDS.

NEW FUNCTIONALITY

Range Safety Box - A new geometry type "Range Safety box" has been added to AFATDS. The intent of these geometries is to represent the impact area (including safety buffers) when you are performing service practice. When one or more range safety area are effective (i.e., the current time is within the effective – expiration time of the safety box) a target must plot within an effective safety box or you will get an incapable option. A new column has been added to the "Attack Options" tab on the intervention point. This column will be red (incapable) if one or more safety boxes are effective and the target does not plot in at least one of the effective safety boxes. Currently there is no label on this Geometry.

NET/NLT Improvements - Improved Mission scheduling logic for cannon, mortar, and naval gunfire support systems for missions with a specified NET to defer transmission of the fire order until the prescribed NET time. Earlier AFATDS versions would send the mission to the weapon(s) (Paladin, Ship, GDU or Mortar) about 7 – 10 minutes prior to the NET. AFATDS will now monitor active missions that have been transmitted to weapons to determine if the NLT time (if specified) has been exceeded. If it has, AFATDS will automatically transmit an EOM to the weapon.

Attack option ranking now considers "Response Time" - In the Mission preferences window (Attack option ranking" section) the operator can specify the importance of "Unit Response Time" when AFATDS is deciding which of several options should be the recommended option. When the criteria is ranked 1st AFATDS will attempt to select the FS System (Air, Naval, Cannon etc.) and Fire Unit that can get rounds on the way to the target in shortest possible time. For example, moving units have a response time that is longer than a "Stationary - Ready" unit. AFATDS would prefer the non-moving unit in this case.

ASR Target Number - When AFATDS sends an Air Support Request (ASR) to TBMCS, the "Number of Targets Described" field in the ASR message will now equal the "Target Strength" in the AFATDS mission data.

Immediate Air Mission Completion - AFATDS will now accept the Mission Report (MISREP) message from TBMCS on an immediate air mission and change the status of the air mission to "Complete". In order for this to function properly, the TBMCS must send a Request Status Task (REQSTATASK) message approving the initial Immediate ASR to AFATDS when the initial ASR is submitted (the REQSTATAASK provides the Approved Air Mission number that will later be provided in the MISREP).

UNIT STATUS AND SITUATIONAL AWARENESS IMPROVEMENTS

Target Area Hazard (TAH) Improvements - AFATDS now calculates additional TAHs along the missile flight path at locations where the ATACMS (APAM and PSAM) missile is expected to drop below the specified altitude ("ZALT" in the LMM manager window). Previous AFATDS versions only placed TAH geometry at the target location.

Expanded Geometry - AFATDS now allows up to 300 points for line or irregular area geometries. The overall size for a geometry is also increased. Finally, a "get points from map" feature has been added that allows the operator to easily enter the geometry points by simply clicking on the map (no "cut & paste" required). Maximum distance between consecutive points in the geometry is now 1000km. Earlier AFATDS versions allowed a maximum of 30 points. Note that if the operator attempts to transmit a geometry with more points than the destination system supports, then AFATDS will fail the transmission and alert the operator.

New Geometry Alert - Currently, when AFATDS receives a individual geometry and the name for that geometry is already in use, then AFATDS will simply update the existing geometry with the new data (geometry type, location etc.). This can result in the geometry type changing (e.g. "Assault Objective – Bravo" would become "Assembly Area – Bravo"). The improvement here is that AFATDS will now alert the operator that a duplicate geometry name was received (the database will still be updated automatically). Receipt of "bulk" geometry (from a "transfer current") will not trigger this alert.

FA CP composite range Capability display - AFATDS can now show a range circle for a selected FA CP that commands Fire Units. The range fan will be a circle located at the center of mass of the CP's subordinate Fire Units. The Radius of the circle will equal the maximum range of the subordinate fire units.

Allow Fire Requests & unit data to be processed even if sending unit is not in communications or current - This new feature will allow AFATDS to accept missions or unit position reports from JVMF systems (JVMF or JVMFR5) that are not in the current situation. If the sending unit is not in the AFATDS current (but is in the JMUL) the operator is alerted when the message is received and given the option to have the unit added to communications and the current situation – the message can then be processed. Previous versions of AFATDS would simply discard the message.

Ammunition Tab for Cannon units - The ammunition inventory tab for cannon units has been redesigned to allow for easy entry of ammo data at the bottom

of the list. This eliminated the "old" (ammo model & lot) window that was previously used.

Ammunition Threshold data - The threshold criteria are now all consolidated on one tab in the unit data. You may still set criteria for each munition category. The operator may also set threshold data for two specific munition models. Tripping a threshold will prompt the operator to initiate re-supply activities (see "Re-supply Management Capabilities" below).

Logistic Units - AFATDS now supports "Logistic" unit types. These unit types are useful when you are tracking individual ammunition re-supply vehicles (such as a FASV). When you create a new unit the "Logistic" unit type will be one of your options for the type of unit to create.

PASS (Publish and Subscribe Service) - The PASS is a new means of supporting horizontal information exchange with other ABCS 6.4.0 systems. The PASS provides Situational Awareness (SA) data which AFATDS can store, display, and distribute as part of the Common Operational Picture (COP). AFATDS also publishes data to the PASS. Specifically, AFATDS will publish information on fire support units, fire support coordinating measures, and targets. The SA data received by AFATDS will come in the form of "tracks" (friendly and enemy unit information) and battlefield geometry.

AOI (Area of Interest) - AFATDS creates an AOI for each item published to the PASS server by AFATDS consisting of a rectangle surrounding the published item. The AFATDS operator can create an AOI to be used when subscribing to topics from the PASS Server. A single AOI will be used for all subscriptions. This AOI will be associated with the windows used for setting up the PASS interface, displayed on the map, and stored in the database.

EMT Protected Area Checks - In previous versions, when EMT checked targets against protected areas and "no strike" targets, it did not consider target size. Rather, it performed a simple "point in area" check. Now EMT considers target area when checking targets against protected areas.

COMMUNICATIONS ENHANCEMENTS

188-220C Network - AFATDS 6.4.0 adds support for the 188-220C network. Like 188-220A (which has been in AFATDS for several years), 220C is an IP based network. Most systems (like the Naval Fires Control System – NFCS, Tactical Exploitation System – TES, Paladin, MLRS and new observer devices) are moving to this new network standard. 220C supports wire, HF, SATCOM and SINCGARS communications

JVMF Reissue 5 message specification - AFATDS now supports the JVMF Reissue5 message specification. This is the latest message standard for new Joint systems. A new device type (JVMFR5") has been added to support identification of these systems in the AFATDS Joint Master Unit List (JMUL) - The JVMF Reissue3 specification ("JVMF" Device type) and the "Package 11" family of systems will still be supported so that other systems that have not yet implemented the latest standard can still talk to AFATDS. Note that the JVMF R5 devices use the 47001C message header.

USMTF04 Message Specification - AFATDS now supports the 2004 United States Message Text Format (USMTF04) message specification. This is the latest message standard for Army C2 Systems (MCS, ASAS etc.). A new device type ("USMTF04") has been added to support identification of these systems in the AFATDS JMUL. Note that the USMTF04 devices use the 47001C message header. The 2000 USMTF specification ("USMTF00" Device type) and the 1993 USMTF specification ("ASAS", "MCS", "CSSCS" and "FAADC3" Device types) will still be supported so that other systems that have not yet implemented the latest standard can still talk to AFATDS. As a reminder, the USMTF 1993 devices use the send mail (LAN only) interface with no header while the USMTF00 devices use the 47001b header.

Naval Surface Fires System (NFCS) interface updates - AFATDS now has a defined interface to the NFCS system. NFCS is the C2 system aboard ships that accept AFATDS fire requests. The Device type used for this system will be "JVMF".

Tactical Exploitation System (TES) interface - AFATDS now supports a formal interface with the TES (a sensor system supporting the joint forces). TES collects & filters intelligence data and submits Intelligence reports (ATIs) to AFATDS for possible attack. The AFATDS operator can establish search criteria for the TES by using the "Search Criteria" under the "Targets" menu item.

ASCA interface - AFATDS has updated its message interface with the ASCA systems (formally known as "NATO" systems) to the CTIDP 04 standard. The "old" device types of "Atlas", "Bates" and "Adler" have been removed and a single device type ("ASCA") is now used when inter-operating with the United Kingdom, France, Germany or Italy C2 systems.

Support Check-fire/ceaseload by Fire Plan in ASCA interface - The ASCA systems can send a message ("Check fire by Fire Plan XXX") to AFATDS. AFATDS 6.4 has been updated to accept this message and automatically checkfire each target in the referenced fire plan. Note that in order for AFATDS to checkfire these targets the fire plan must have been previously executed at the AFATDS Node that received the Checkfire.

HF Radios - AFATDS now supports the Navy & USMC HFRG/ANDVT & URC-109/ANDVT HF radios on 188-220C networks and 188-220A networks. Up to 4 subscribers may be supported on the HF nets.

SATCOM Radios - AFATDS will support the PSC-5 SATCOM radio in the "Non-DAMA" mode. To configure a network for this type of radio select "SATCOM" as the Radio type. 5 KHz and 25 KHz rates are supported.

Launcher Communication - Now that the MLRS launchers are capable of us-

ing INC, AFATDS supports an "auto-relay" capability over this type of network. If a message is unsuccessful on a network the sending station will automatically try to route the message through another node to get it to the destination. The operator does not have to set up this feature; it is simply a capability of the 188-220 INC networks.

View LDIF PDF File - A menu selection to view the LDIF PDF file has been added. This will be under the AFATDS operator menus located at <AFATDS Functions><AFATDS Operator Documentation><View LDIF>. This will display the LDIF pdf file.

Change Workstation Hostname - A menu selection item is now available to users with SYSADMIN privileges to change the workstation hostname. Log in as the SYSADMIN user and select START >> SETTING >> CHANGE HOSTNAME.

NEW RE-SUPPLY MANAGEMENT CAPABILITIES

Re-supply Planning - AFATDS can now Generate Move & re-supply orders for Cannon units & Re-supply units. To use this capability the operator pre-plans resupply locations and resupply units (basically associating a re-supplying unit, a re-supply location and a Paladin).

Re-supply Execution - AFATDS now automatically monitors on-hand vs. authorized munitions for Cannon Fire units (like a Paladin). When an ammunition update is received from a Paladin and the ammo on hand has reached a critical level (The "Critical level" is specified by the operator in the Paladin's unit data), AFATDS will automatically generate a re-supply recommendation for operator approval. Note that the Paladin System is currently not capable of accepting a "Resupply order" – so the operator may want to send a PTM to the Paladin when using AFATDS re-supply monitoring functions.

Re-supply Execution - The Operator can also direct re-supply at any time. Re-supply instructions are now available in AFATDS for Single weapon cannon fire units (like Paladin).

TARGETING UPDATES

Fire Finder has been added (this uses the "JVMFR5" device type). The RDO capability in AFATDS has also been updated to support up to 30 Firefinder Zones.

Target Updates - AFATDS has been updated Accept Target updates from firefinders. If the Radar sends in an updated target location (either via a CFF or ATI) for a target that is not currently active then AFATDS will automatically update the target data based on the latest information from the Radar.

Targeting with the Tactical Exploitation System (TES) - TES is a sensor system that may directly communicate with AFATDS via the USMTF00/47001B interface (over LAN, wire or Radio).

Search Criteria for TES. AFATDS now provides search criteria for target data specific to the capabilities of the TES - If you want to establish search criteria for the TES open the Target Criteria window under the "Targets" menu item. When the TES locates a target meeting your search criteria it will report it to your OPFAC as an ATI.

BDA from TES. TES will report BDA (if available) on targets that AFATDS sends to TES as MFRs.

Expanded target search capability. The target search window has been enhanced to behave more like a "windows" display. Also, "Target element type" (T72, BMP etc.) has been added to the criteria upon which you can search.

WEAPON & MUNITIONS MANAGEMENT

New Mortar systems (M224 60mm & M120/M121 with sub-caliber device) and associated ammunition models have been added. Obsolete weapon models have been removed.

New Cannon Munitions - (M4A1 white bag) and 105mm RAP (M927) have been added.

New MVV data - AFATDS now provides for “basic” and “enhanced” MVV management. Enhanced MVV management divides MVV into propellant performance (MVV_Lot) and tube wear (MVV_Wear) components. Users who control the new “Software Block I” Paladins (i.e. Paladins that use the VMF R5 message interface) should select Enhanced MVV management for their Paladin units. Others should select Basic MVV management. This selection is found on the Detailed Unit Data tab for cannon units.

NATO Munitions - AFATDS adds the "Country of Origin" indicator for projectiles and fuzes. Many new NATO ammunition models have also been added for Cannon unit types.

M777A2 Cannon - The M777A2 represents the "Towed Artillery Digitization" (TAD) cannon upgrade that allows the M777 lightweight towed 155mm to communicate with AFATDS via JVMF messages. M777A2 cannon units are managed like Paladins. A M777A2 cannon should be built as an individual fire unit (authorized & on-hand of 1 weapon) in the same way the Paladin fire units were set-up in earlier AFATDS versions. M777A2 cannons are managed by the Battery (built as an "Other" unit type with a role of "FA CP") as individual weapons so you manage at the Battery using the Cannon Weapon monitor (NOT the GDU weapon monitor).

JTJ Munition - JTJ is a GPS guided unitary warhead MLRS Rocket. Like the JEG DPICM munition added in AFATDS 6.3.2, JTJ is very accurate due to small delivery errors. This new munition is referred to as "MLRS HE". You will find this new munition listed in guidances and munition selection windows (such as, "Initiate fire mission").

ERGM - The Extended Range Guided Muniton (ERGM) is a Naval delivered GPS guided projectile. While the "ERGM" selection was listed in AFATDS 6.3.2 as a munition, AFATDS 6.4.0 adds the Loadable Munition Model (LMM) and Effects data so that a much better analysis of the Ship's capability can be performed (including 3D airspace checks based on the ERGM trajectory

determined by the LMM).

TACTICAL AND TECHNICAL FIRE CONTROL IMPROVEMENTS

"Moving" launchers may be considered capable. AFATDS now allows MLRS launchers with an Operational status of "moving" to be considered capable of engaging a given target (assuming that they have the right type & quantity of ammunition available). Previous versions of AFATDS prohibited "Moving" launchers from being considered capable.

AFATDS will display solutions for "Combat" or "Emergency" ballistic solutions. Previous AFATDS versions prevented the display of a capable option if the ballistic calculations resulted in a solution that was categorized as "Combat" or "Emergency". AFATDS will now display these solutions to the operator. Fire commands for "Combat" or "Emergency" will not be sent to the weapons without operator approval.

Use Gunner's Quadrant - AFATDS will now send "Use Gunners Quadrant" command with Fire commands sent to GDUs or Paladins when the mission is "danger close" or "destruction". AFATDS will also allow the operator to specify the Use Gunners Quadrant" when initiating a fire mission. QE will be sent in tenths of mils to Paladins and will display tenths of mils in the fire commands window.

Simo Missions - AFATDS now supports "Simo" missions with GDU weapons. "Mission number" has been added to the GDU monitor and will also be sent to the GDU devices. This allows the GDU operator to distinguish between fire commands for different missions that are currently ongoing. The FDC operator can still push ("send" option) fire commands for additional missions to the GDUs even when they already have a mission. Fire commands for any mission that were previously sent to a GDU will now be automatically sent (earlier AFATDS versions required the operator to "push" fire commands for the 2nd mission when an adjust was received). AFATDS will support up to 9 missions active at the GDUs at any one time.

Record of Fire - AFATDS now provides capability to automatically generate a record of fire for each fire mission fired by "non-Paladin" weapons. AFATDS will also accept Record of Fire information (digitally) from individual Paladin Howitzers and will be capable of requesting ROF data from a paladin via the "Request status" function on the Paladin weapon monitor. AFATDS will maintain a Record of Fire file that the operator can manage (Delete, Print, Archive and filter). At least 150 ROF can be stored in AFATDS.

Quick Smoke - AFATDS now automates the management of the Quick Smoke mission (two new mission types "Quick Smoke" and "Quick Smoke Adjust" have been added to the Initiate fire mission window). AFATDS computes the buildup and sustaining volume of fire and interval between rounds and will manage the sending of fire commands to GDU equipped weapons. Paladin weapons will be provided fire commands for the "initial buildup volley", and then AMC fire commands for the "sustaining volleys" portion of the mission. If more than one sustaining volley must be fired, the commands will include an "interval between rounds" which the Paladin will use to control the firing of the remaining smoke rounds.

Pasquill Data - A new window has been added under the "MET" menu item to support input of general weather information required to perform quick smoke calculations. You may select "use MET data" option to populate several fields on this window if desired. In any case, make sure you set up the Pasquill data in order to get the best solutions for quick smoke missions.

Schedule of Fires - AFATDS now uses the "sustained rate of fire" for all schedule of fires calculations. Earlier versions of AFATDS used a "Max rate of fire" for weapons during their 1st 3 minutes of firing time in the schedule. This sometimes resulted in fire units being assigned targets that they could not engage when the fire plan was executed (because capability checks for unit response time are based on sustained rate of fire). This change synchronizes the logic that AFATDS uses for schedules of fires and attack analysis.

MLRS Launcher Missions - AFATDS now allows 1 priority ("immediate") and 11 normal ("as acquired") active missions to be sent to an M270A1 launcher. M270 launcher models still support only 1 priority and 2 normal missions.

FASCAM Missions - AFATDS will allow a mixed minefield mission to be initiated (operator specifies FASCAM munition types in FFE1 & FFE2). AFATDS will default the angle of fire to "High" for mixed minefields so that the same aimpoints are used for the FFE1 & FFE2 phases.

WINDOW NAVIGATION AND HUMAN INTERFACE

Single Menu Bar - The Main, Current and Plan menu bars have been consolidated into one menu bar (to increase display space for the map). Menu items are grayed out depending on the context you are viewing (for example, when you are viewing the current situation the "Planning" menu item is grayed out). Plans are still opened from the "Situations: menu item and you may toggle between plan and current by simply clicking on the appropriate tab in the map window.

New Icons & Functions available on the tool bar - The consolidated menu bar also now has a consolidated tool bar directly below. New Icons added to the tool bar include: Create Free text message, Checkfiring, Cancel Checkfiring, Subordinate unit monitor, Active mission status monitor and Preferences tool.

Free Text icon - This opens the CMP Free Text window.

Check firing & Cancel Check firing - These open the appropriate windows that used to be accessible from the menu item.

Subordinate unit Monitor - This window displays a list of units subordinate to your OPFAC. The window displays key information about your subordinates including Operational Status, Unit type, supply status. You may navigate ("drill down") on any unit selected in this list to

view detailed unit information.

Mission Status Monitor - This window provides a "heads up" display of all active missions at your OPFAC. The window will automatically refresh when a mission status changes (e.g. "Rounds complete", Denied" etc.). Details about any mission in the list are provided in the bottom portion of the window.

Display Preferences. This window allows you to tailor the map display to your needs. It supports set up of display preferences for units, geometries and targets. You can change color schemes and line boldness based on the type of geometry (e.g. you may change the color of FSCL geometries to purple and the line thickness to "bold"). You may also change the Color and icon size for different unit types & echelons (for example, radar units could be shown in green color with a "large" icon, or Brigade size units could be displayed as small black icons). Targets can also be displayed differently based on target state (active, inactive etc.) and target type (e.g. display as Fire Support targets in red color).

Symbol Selection on the Map - AFATDS now will display a selection list when you click on the map in the vicinity of two or more symbols. The purpose of this window is to allow you to select which specific item you wish to highlight.

Symbol Drag - AFATDS now has a feature to enable-disable the dragging of unit icons on the map. When the feature is disabled you cannot select a unit and drag it. This is a safety feature implemented to prevent the operator from inadvertently moving a unit while clicking on the map. AFATDS software is delivered with drag symbol "disabled". If you want to enable this capability go to the "Map" menu item icon the AFATDS menu and select the Drag symbol option.

INTERVENTION POINT IMPROVEMENTS

List of Missions pending intervention - AFATDS now displays all missions waiting for intervention at the top of the intervention point itself. When you click on the IP icon in the tool bar the IP will open (with the data for the 1st mission displayed) and the top part of the window will list all missions waiting for operator action. The list may be sorted (by clicking on the column header). You may navigate between missions simply by clicking on the list.

Adjusting weapon display on IP – tech solution - A section has been added to the Cannon Technical Solution tab of the intervention point. This new section shows specific data for the Adjusting weapon. Previous AFATDS versions contained the adjusting weapon's data within the FFE1 section.

Add "Adjust"/ "initial CFF" indicator to Intervention point (allows operator to discriminate between initial CFF & subs adjust) - The window containing the list of missions awaiting intervention (this is the window that opens up when there is more than 1 mission at intervention) now identifies missions based on whether the message requiring intervention was an Adjustment on an already active mission or a new mission. The Intervention point widow itself also contains an indication of whether the mission being viewed is an adjustment or the initial Call for Fire.

Add TOT & NLT time to intervention point list - The window containing the list of missions awaiting intervention (this is the window that opens up when there is more than 1 mission at intervention) now allows operator to see the TOT times (if applicable) for each mission waiting for the operator to action. This feature allows the operator to better decide which mission to action next. For example, when a Fire Plan is executed (with intervention on) many missions will queue up at the IP. The operator can now tell which mission he should action 1st (the earliest TOT).

COMMUNICATIONS WINDOWS

Add Communications workspace – This workspace features a "Drag and Drop" capability that allows the operator to move networks into a communications configuration. All Communications data is now viewable on a single window.

Improved communications windows - AFATDS will default network parameters and addressing to facilitate comm set-up & reduce chance of operator error. Several "Pre-setup" networks have been added. This allows the operator to select a "Standard" 188-220C network (e.g. Brigade Ops-Fire") and AFATDS will default all pertinent data (address, station ranking etc.).

Find Symbol - The Find Symbol menu item now provides access to the Target, unit and geometry workspaces. Each of these workspaces contains a "find on map" capability (this is a menu item or the tool button with the binoculars over the world). The Find on map centers the map display on the target, unit or geometry and highlights the symbol (so you can use the pop-up menu (from the right mouse button) if desired).

Weapon Monitors show "Operational status" (e.g., "ready", "Moving", etc.) on GDU & Paladin weapon monitors - This allows the operator at Cannon Battery or Platoon to monitor the individual weapon status without requiring him to open the unit data window. Show the TOT time (actual DTG) on the weapon monitor for TOT missions. A "Round" column was added to show the volume of fire for each mission listed on the monitor.

Master Unit List - The Master unit list window has been completely overhauled. The window is now a spreadsheet with "point and click" sort capability, find feature and filter tool. The "Device type" ("PK 11 system", "JVMF", "USMTF00" etc.) will now be associated with a logical (familiar to user) name. For example, the system type for a Forward Observer system (FOS) will now be listed as "FOS" with options for the type of messaging it will use (JVMF, PK 11, JVMF R5).

AFATDS Unit Numbers (AUN) and Unit Reference Numbers (URN) - AFATDS now sends information about units between AFATDS units using the URN. This means that it is very important (as it always has been) that the URNs in the JMUL are consistent across

all OPFACs - This also means that the AUN can be different between AFATDS OPFACs for the same unit (AS LONG AS THE URN IS THE SAME!). This feature will improve the capability to add new units to the JMUL in the field. Operators no longer have to make sure the AFATDS Unit number is the same (it doesn't matter anymore).

AFATDS Shutdown - The AFATDS operator can now shut-down the workstation without having to log in as the "System Administrator".

ASR TOT - AFATDS now allows the operator to specify a TOT time for an air mission (instead of having to enter both the start & end times). If the operator uses a TOT time the message sent to TBMCS will indicate the same DTG for the start & end times for the air mission. The TOT time is also available for display in the Air support List (ASL).

Trigger Event Window - Some slight reformatting of this window has been incorporated to make it easier to use. No changes in the basic capability of trigger events were affected by this change.

15 Overlays Supported - Operator can now have up to 15 overlays associated with his map. Earlier AFATDS versions supported only 8 active overlays at a time.

Addition of Print Pro Software - AFATDS 6.4 uses the COE ESP Print Pro software to manage printers. This means changes to the procedure for configuring printers. See the operator's notes section for the procedure.

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▲TOP

Surface Danger Zone Construction

Captain J.T. Berdusis

The Officer Instructor Group has added GD02SD Surface Danger Zone (SDZ) Construction to the Field Artillery Officer Basic Course. The course began with class 4-04 and from this point on, all Lieutenants arriving to the Fleet will know how to construct a SDZ. In the Fleet, there are countless examples of when surface danger zones are constructed. The most common examples are RAP and Direct Fire SDZs at 29 Palms, Crew Served Weapons ranges at Camp Lejeune, small arms ranges in Thailand and countless other examples of where SDZs are needed. Unfortunately, in the past an Artillery Officer that newly arrived to the Fleet learned how to construct these the day before the shoot, and did not fully understand the mechanics of why or how an SDZ is constructed. The new SDZ course is designed to alleviate this problem and give the Student Artillery Officer a better understanding of how the restrictions and limitations of firing artillery (or other weapons systems) are generated.

In the last two years the safety publications used for the construction of SDZs have changed. Currently, the Department of the Army Pamphlet (DA PAM) 385-63 in conjunction with MCO 3570.1B is the only authorized references for generating SDZs. Both the DA PAM 385-63 and MCO 3570.1B are available for download through the Marine Corps website.

The class numbered GD02SD Surface Danger Zone Construction covers the entire process of how to determine artillery safety from a firing point. The list of authorized publications, Technical Manuals, Field Manuals, and required gear for construction are outlined in the first phase of the course. The student then proceeds through the DA PAM 385-63 with emphasis on Chapter 11, Field Artillery Safety. Areas A through E are clearly defined as well as the Impact Area and Target Area. This class provides a step-action drill for constructing an SDZ (since no guidance is provided in the DA PAM 385-63). After a SDZ is constructed on a firing chart, the student will learn how to determine his minimum and maximum ranges, left and right azimuth limits and azimuth of fire. In accordance with the FM 6-40, or any other command certified method of computations, the student will compute pre-occupation safety.

The preferred method for SDZ construction, is to construct the SDZ on a grid sheet. Chapter 6, FM 6-40 provides an explanation of the tools, methods, and accuracies for creating a firing chart. This provides an extremely accurate SDZ upon completion. By utilizing a grid sheet, the creator can easily extract the left/right and min/max ranges for pre-occupation safety. Use of this method is not required when constructing a SDZ for a weapon system in which this level of accuracy is not required, such as small arms or crew served weapons. In these cases, constructing an SDZ on an acetate overlay utilizing a Range Azimuth Scale would be sufficient.

Below is a sample step action drill used for the construction of a low angle HE/Q Surface Danger Zone for artillery firing at fixed targets. For artillery direct fire SDZs, small arms, crew served, and numerous other weapons systems, adjust this step action drill to encompass those variations.

Constructing a proper SDZ gives a battalion the ability to “squeeze out” those extra few meters of impact area for training. Often times training area safety or ARSS generated range safety cards severely restrict the size of the target area. Manually constructing SDZs gives the Fire Direction Officer the option of creating doglegs (or not) in the target area, and creating a target area which will encompass all the usable targets in the impact area. The Fire Direction Officer can now choose which charge to fire based on data from the TFT, local range regulations, angle of fall, or tactical situation.

The DA PAM 385-63 is used for computation of SDZs for small arms, tank main gun, hand grenades, and numerous other weapons system and ordnances. By familiarizing the student with the DA PAM 385-63, this gives the student exposure to the other types of SDZs for weapons systems and ordnance he will most likely have to construct.

References:
MCO 3570.1B DA PAM 385-63
FM 6-40 TFT 155-AM-2
TM 43-0001-28 w/ch 9

POC
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DSN 639-6526

STEP	ACTION
1	Orient your grid sheet with the LLHC corresponding to fit your target area and firing point.
2	Plot grids to the target area on the grid sheet and connect the lines between the grids. (Note: There is no reference for recording the Impact Area in red, however this will facilitate better visualizing the area. Grids to the target are either provided by Range Control or map spot.)
4	Plot firing point on grid sheet.
5	Create permanent azimuth indexes from the Firing Point.
6	Create a 350 meter radius circle around the firing point location (low angle fire). Note: This will help facilitate the creation of Area E.
7	After Orienting the RDP on the battery location, scan along the far edge of the Impact Area to find your far edge of Area B. Using the push/pull method, record this line on your grid sheet.
8	Re-orient RDP along far edge line of Area B. From this line decrease 725 meters. Slide the RDP to the left edge of Area A. Record a point 725 meters decreased from the far edge of Area B and 725 in from the edge of Area A. Repeat this process with the right edge. Using the push pull/method, connect these two points. Note: This arc forms the near edge of Area B and should provide a uniform 725 meter buffer.
9	From the left edge of the arc created in step 8, draw a dashed line to the firing point. Repeat this process for the right edge of the arc to the firing point. Record a dashed line from the ends of the arc created in step 7 towards the firing point. Ensure to maintain the 725 meter buffer for Area A.
10	Orient the edge of the RDP so it forms an intersection with the outer edge of Area D, the near edge of the impact area, and the edge of the RDP. Add 350 meters to the range determined to this intersection. Form a new intersection with the RDP, the newly determined range, and the outer edge of Area D. Using the push/pull method, record a line from the left to right. This is the near edge of Area C.
11	Orient the RDP to the intersection of the edge of the RDP, the near edge of Area C, and the dashed line created in step 9. Increase the range from this point by 350 meters (Area C). Using the push/pull method, record a line from left to right at the newly determined range. This arc forms the far edge of Area C. (In this example, Area C is constructed for Quick fuzes only. Increase Area C to 550 meters if firing Time or VT.)
12	Record the lines connecting the near and far edges of Area C.
13	Determine probable errors. Probable errors are used are corresponding to the center of the impac Your browser does not support JavaScript! **Table 11-1 Basic impact area dimensions** **Limits** — **Dimensisons** **Left** — Eight deflection probable errors (PE_D) from the left limit of target area. **Right** — Eight deflection probable errors (PE_D) from the right limit of target area. **Far edge** — Eight range probable errors (PE_R) from the far edge of target area. **Near edge** — Tweleve range probable errors (PE_R) from the near edge target area. Example: Utilizing the 155-AM-2, Charge 3 GB table G, we extract the following data and express to the nearest 10m: Ex. Range 5000m **29 PER X 8 = 232m (230m)** **4 PED X 8 = 32 (30m)** **29 PER X 12 = 348 (350m)**
14	From the inner edges of Area A, buffer in 8 PED (**Ex. 30m**).
15	From the near edge of Area B, buffer in 8 PER (**Ex. 230m**).
16	From the far edge of Area C, buffer in 12 PER (**Ex. 350m**).
17	Record lines to create Target Area.
18	Using dashed lines, connect the edges of the Target Area to the Firing Point.
19	Erase the 350m radius circle (the portion not used in the SDZ)from around the Firing Point.
20	Record the Area E (**Ex. 350**) in accordance with Diagram 11-2.
21	Using the RDP, from the firing point, measure off a 25 degree angle (444.25 mils expressed to 440 mils) from the inner edge of Area D (on the left side) to the far edge of Area D. Record this line from the firing point to the outer edge of Area D. Repeat this process with the right side.
22	Using The RDP, record the minimum and maximum ranges, and the left and right azimuth limits. This will provide you with the dimensions for your basic safety diagram.
23	Affix your acetate overlay to your map and record the basic safety diagram on your map. Extract your min and max altitudes for your basic safety diagram from a map spot.

Munitions for the USMC High Mobility Rocket Artillery System (HIMARS)

1stLt Giorgis, C.A.
HIMARS Test Unit

The current Multiple Launch Rocket System Family of Munitions (MFOM) has changed very little since the Army's introduction of the M270 Multiple Launch Rocket System (MLRS) in the late 1980s. These rockets are effective against soft targets in open areas; however, they are less suitable in constrained environments and situations where dud-producing submunitions are inappropriate. The near-future MFOM addresses these issues by increasing the range and accuracy of the rockets while simultaneously decreasing dud rates and the probability of collateral damage. Additionally, improvements and additions to the Army Tactical Missile System (ATACMS) Family of Munitions (AFOM) will increase surface-to-surface missile range and effects. The US Army is the lead agency for the development of the MFOM and AFOM; it is important, however, to understand the Marine Corps' concept for fielding and employing these munitions. The Marine HIMARS fielding plan includes a select portion of the MFOM with a capability to employ the AFOM. Outlined below are the munitions planned for use with Marine HIMARS.

The existing M26 Dual-Purpose Improved Conventional Munitions (DPICM) Rocket will provide the Marine Corps with an interim capability in FY 05. The M26 is a free flight, unguided, fin-stabilized rocket with 644 submunitions effective against light armor, soft-skinned vehicles, and personnel. Although offering a significant increase in firepower over an equivalent cannon unit, the M26 has a limited range (10-32 km) and accuracy (up to 10 mils deviation).

The Marine HIMARS' primary munition will be the M30 Guided MLRS Rocket. Using both inertial and Global Positioning System (GPS) guidance and control packages, the M30 is much more accurate than free-flight rockets. It follows a semi-ballistic trajectory in which accuracy deviates less than one mil throughout its range of 15-60+ km. The M30 carries 400 DPICM submunitions suitable against a target set similar to the M26. Improved design and decreased dud rates allow for comparable effects despite carrying fewer bomblets. This combination of increased range and accuracy will give MAGTF commanders an opportunity to engage a wide variety of targets in all-weather conditions and achieve greater effects with fewer launchers and rocket volleys.

In the near future, the MFOM will include the Guided Unitary Rocket. Much like the M-30 DPICM rocket, the Guided Unitary Rocket is exceptionally accurate at extended ranges (15-60+ km). However, it contains a 200 lb high-explosive unitary warhead with proximity, quick, and delay fuze settings. The Guided Unitary Rocket will be capable of attacking a wide variety of targets, from hardened positions to targets that require minimum collateral damage.

Due to the restrictive nature of most installation ranges, HIMARS batteries will train almost exclusively with the M28A2 Reduced-Range Practice Rocket (RRPR). The RRPR uses a blunt-nosed, high-drag warhead section to limit range to 8-15 km and reduce surface danger areas. Due to its lack of a warhead event and significant probable errors during flight, the RRPR is not an effective observer training tool.

The AFOM is a set of guided missiles compatible with HIMARS. The Marine Corps is not scheduled to purchase any of these missiles. As a theater asset, ATACMS will generally be controlled at an echelon above the MEF; however, Marine HIMARS units will maintain the capability of firing these munitions as theater commanders may allocate and authorize their employment by Marine HIMARS units.

The set of AFOM missiles offers a variety of capabilities. Payloads include anti-personnel/anti-material (APAM) bomblets, self-guiding anti-armor submunitions, and a 500 lb unitary warhead. All missile types contain a guidance package with later models possessing increased accuracy through the use of both inertial and GPS systems. Maximum range varies from 165 to 300+ km depending on missile type. Each HIMARS launcher is capable of carrying one ATACMS missile on board.

Even without the ready availability of missiles, the MFOM will vastly increase firepower to MAGTF commanders. The introduction of Guided MLRS and Guided Unitary Rockets will provide increased range, improved accuracy, and flexibility over the current MFOM. Coupling the higher lethality with quick response times, increased range, and better accuracy allows MAGTF commanders to attack high payoff and time sensitive targets with powerful, responsive, and accurate fires. As a general support weapon within the division, rocket artillery will also free cannon battalions to perform their direct support missions reducing the likelihood of a change in tactical mission during operations. At the MEF, HIMARS will be a valuable platform whose increased firepower and range will free air assets to engage other targets. In either the MEF or division, the HIMARS MFOM will prove an important addition to current cannon artillery and other fire support assets.

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Lasers: Current Use and Increasing Relevance in the Artillery Community

Capt Grabow

As the modern day battlefield continues to evolve over time, the way in which militaries conduct combat operations also continue to change. As the United States progressed through the 20th century, American forces found themselves gradually increasing their operational commitments in urban environments. This is undeniably characteristic of current operations in support of Operation Iraqi Freedom where American forces are primarily fighting the majority of their battles in or around urban areas. The identification of America's increased commitments in urban areas highlights the necessity and importance to increase our use and development of combat lasers. This holds considerable significance within the artillery community, as well others, for several reasons.

One variable that reinforces the necessity of effective combat lasers on the modern battlefield is the newest addition to the Marine Corps' situational evaluation acronym: METT-TC. Civil considerations can play a strategic role in modern operations and often times gain daily attention through various media outlets. Issues such as collateral damage, civilian casualties, and fratricide can have a significant impact and create negative effects beyond those of the immediate situation. Since precise accuracy in urban terrain has become a top priority for all fire support assets, the field artillery has had to develop new methods to compensate for its area fire nature. Although some critics may argue this goes against its inherent and historic nature, it is simply another example of how field artillery is continuing to adapt in order to provide effective and now "surgical" fire support to maneuver elements in civilly sensitive combative scenarios.

Furthermore, since the introduction of modern meteorological measuring devices, updated survey equipment, more precise muzzle velocity variance (MVV) gauging equipment, tracking procedures, and implementation methods, and more efficient and accurate computational systems; the weakest element of the 5 requirements for accurate predicted fire has traditionally (the last 50 years) been the only element which the artillery observer is responsible for: accurate target location. Through the introduction and development of lasers, artillery can now provide and almost guarantee consistent first round fire for effect results on targets of opportunity. The Marine Corps is currently in the process of updating and fielding new and improved laser systems to include the Vector 21B. The Vector 21B is a lightweight (3.76 lbs), eye-safe laser rangefinder that is capable of being carried and employed by a single Marine. It can determine distances up to 10 km with a magnification of 10X using the optical enhancer. Older versions only reached out to 4 km. The Vector 21B, in connection with certain GPS systems, also provides azimuth, angle of elevation, and a ten-digit grid to the target. This new system is also equipped with a night vision sight to facilitate 24-hour operations. This is a capable target location device and when combined with the Pocket Forward Entry device, will significantly increase an observers ability to identify, locate and engage targets.

Additionally, insightful after action comments from past and current operations in OIF and OEF have provided Fort Sill with valuable information regarding the future skills and proficiencies that artillerymen need to demonstrate upon graduation. The school house has implemented a more "hands on approach" to laser proficiency by providing an additional 4 hours of laser practical application into the program of instruction (POI) (on top of existing instruction) for artillery officers going through the Officer Basic Course. Students are now being trained on the tactics, techniques and procedures (TTPs) for this new laser in an operational setting. This refocus of the POI is specifically designed to better prepare future observers for the increasingly demanding challenges they may face in combat.

More effective lasers now allow artillery battalions and batteries to provide maneuver elements with the most accurate and effective artillery fires any military force has ever experienced. The only all weather, 24/7, fire support asset for centuries has not become an outdated dinosaur but instead has continued to become a more flexible, adaptive and more relevant weapon on an ever changing battlefield. Semper Fi!

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Fire Support Instructor
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Pre-Command Course

The Pre-Command Course (PCC) is a joint course that covers all aspects of fire support and command responsibilities at the LtCol and Col level. Topics covered include (but are not limited to):

- Command Philosophy
- Fire Support operations and TTPs
- Doctrine
- Weapons Systems
- RADARs, Survey, Met
- Legal
- Maintenance
- Automated Systems

Orders can be arranged through LtCol Joe Harrison (LtCol Ground Monitor) DSN 278-9279 or Col Cal Swain (Col Monitor) DSN 278-9300.

FY05 schedule:

Class	Start Date	End Date
02	Jan 18 -	Jan 28, 05
03	Feb 14 -	Feb 25, 05
04	Mar 22 -	Apr 01, 05
05	Apr 12 -	Apr 22, 05
06	May 23 -	Jun 03, 05
07	Jul 19 -	Jul 29, 05
08	Aug 29 -	Sep 09, 05

PCC Website
http://sill-www.army.mil/30th_FA/index.htm

POC: MSgt Fleener
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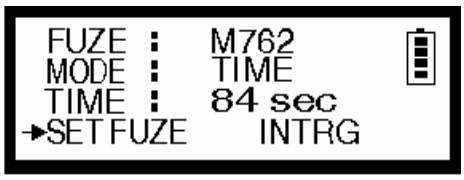
PORTABLE INDUCTIVE ARTILLERY FUZE SETTER

Sgt Eddy, W. G.

The Portable Inductive Artillery Fuze Setter (PIAFS) is on deck and being taught at the Marine Corps Cannon Crewman Course. This is a significant improvement in setting fuzes and will reduce firing cycle time and setting errors for artillery crews across the Marine Corps. The PIAFS is a hand held electronic fuze setter that sets the M767A1, M762A1 electronic time fuzes, and M782 Multi-Option Fuze Artillery (MOFA). PIAFS has been developed and produced by Alliant Technologies. It has been procured and fielded by the U.S. Army and has been successful in reducing the "human error factor" associated with setting various types of fuzes. PIAFS is capable of setting the US fuzes mentioned as well as NATO fuzes. PIAFS is water resistant and uses a Liquid Crystal Display (LCD) to display the time set to the operator. It is powered by two D-sized batteries located within the handle of the setter, and has a battery meter on the LCD screen to monitor the power remaining. The screen and three function buttons, (up, down, and enter) are located at the top end of the handle. The under side of the screen is a fitting in which the fuze will be inserted for setting. The PIAFS has been designed and tested to perform it's function from temperatures ranging from -40 degrees to 145 degrees Fahrenheit.

Once a time has been entered, the PIAFS is placed over the nose cone of the fuze and "enter" is pressed to set the time on the fuze. The LCD screen will display "Fuze Set-OK". If the LCD screen does not display this function repeat the steps to set the fuze. Replace the fuze if it does not set.

The PIAFS has an interrogation mode, allowing the Section Chief to verify the setting on a fuze. In order for the Section Chief to verify the proper time setting he will select the interrogate option



on the PIAFS and press "Enter". The fuze, mode, and time setting on the fuze will be displayed on the display screen. The last twenty five time settings are automatically stored in the system.

The PIAFSs primary advantage will be noted during multi-round missions, because once a time is entered into the PIAFS, the operator can quickly set each fuze for the mission.

PIAFS will begin to be fielded to active duty artillery units in the near future.

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NEW TRAINING FUZE ARRIVES AT MCCCC

SSgt Michael C Robertson

The Marine Corps Cannon Crewman Course (MCCCC) recently received four XM94 Training Aid Fuzes. The XM94 is an inert training fuze designed to simulate the manual and inductive setting procedures of the M762A1 Electronic Time Fuze (ET). The training fuze will enable the Cannon Crewman Course to provide more comprehensive training on setting fuses. Below are some of the advantages and disadvantages of the new fuse.

The XM94 will allow instructors to provide students needed training with the M1155 Portable Inductive Artillery Fuze Setter (PIAFS). Students at MCCCC will also be able to set the fuze manually by turning the ogive of the fuze bi-directionally. The ability to rotate the ogive bi-directionally will enable the students to see the difference between the M762 and the M762A1. The Liquid Crystal Display (LCD) readout for point detonating action (PD) is the PD setting vice the black triangle 98.0. This difference will eliminate errors when setting the fuze (XM94 and M762A1) for PD action.

There are some disadvantages to the XM94. The fuze can not be set back to shipping and storage setting with the M1155 PIAFS or by hand. To return the XM94 to the shipping and storage setting, the fuze has to remain still, with no movement of the ogive for 45 seconds. The XM94 is not threaded to support properly mating to the projectile prior to setting it. These features differ from our M767/M762 training fuzes which are set by hand, vice with the M1155 PIAFS, and can be mated to projectiles prior to setting the fuse.

Prior to the addition of these training fuzes, training with the M1155 PIAFS was limited to two live fire exercises conducted during the course of instruction. The XM94 allows for additional hands on time with the M1155 PIAFS, increasing proficiency prior to executing during a live fire event. This fuze will also facilitate the instructor's ability to evaluate students use of the M1155 PIAFS.

Even though the XM94 has a few

points for improvement, it will significantly improve our instructor's ability to teach cannoneers proper handling and setting of artillery munitions. Marine Corps Cannon Crewman Instructors have forwarded recommendations to Marine Corps Systems Command to improve the next round of production fuzes to ensure we have the best training equipment possible.

REFERENCES:

TM 43-0001-28
Performance Data Sheet XM94

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▲TOP

M94 Muzzle Velocity System

Sgt Finnegin, E. S.

The "King of Battle" has always played a decisive role on the battlefield, this remains true today on the "modern battlefield." As the Marine Corps artillery community is fielded with a new howitzer, the M777, the current M94 muzzle velocity system will continue to be employed as the primary means of establishing and tracking muzzle velocities. This piece of equipment provides a key element for accurate predicted artillery fire.

The purpose of this piece of gear is to provide an accurate measurement of an artillery projectiles speed as it travels through the tube. Not every round travels at the same rate of speed. Many factors will effect the projectile as it travels through the tube. How many rounds have been fired through the tube, production lot of the propellant, and actual weight of the projectile are factors that will cause variations in the muzzle velocity. This effects how far the round will travel. If an accurate average can be determined, the Fire Direction Center (FDC) can adjust the firing data and account for this inconsistency. This will improve accuracy and increase the probability of hitting the target on the first round. The M94 is used by both Army and Marine Corps artillery units and accurately measures the muzzle velocity for gun type, projectile, propellant, zone, and lot combinations. The system handles muzzle velocity variations for up to 1000 different gun, projectile, propellant, lot and charge combinations. The M94 is accurate within .05% of the true muzzle velocity.

Marine Corps Cannon Crewmen Course utilizes the M94 for every emplacement on each howitzer. During class 5-04, the M94 was employed with new MACS charges with success. However, the system has not been updated to input data for M231 and M232 MACS charges. M4A2 charge 3WB was inputted for the charge 1L.

The M94 is one of the many pieces of equipment artillerymen use to reduce error, increase accuracy and put steel on target.

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▲TOP

Marine Artillery Detachment S-1 / CONAD

Admin Contact Info: DSN: 639-XXXX COMM: 580 442-XXXX			
Personnel	**4204**	**Admin Chief**	**6187**
Unit Diary	**6199**	**Service Records**	**6199**
Orders	**6188**	**FAX**	**5127**
SDNCO	**2467/5126**	**Marine Btry**	**2467/5126**
Lodging	**5000**	**Lodging Toll Free**	**1-877 902-3607**
Housing Of-	**4647**		

Check-In Procedures:		
Working Hours Mon-Fri 0730-1630	**Report to**	**"Brown Hall" Bldg 759 McNair Ave. Ext 6188**
After Working Hours/ Holidays	**Report to**	**Staff Duty NCO/"Marine Btry" Bldg 6007 Sturgis Ave. Ext 2467/5126**

CHIEF WARRANT OFFICER 3 JESUS HERNANDEZ JR.

COMM 580 442-4204 or DSN 639-4204 or EMAIL jesus.hernandez@sill.army.mil

TAD To Fort Sill:

1. Ensure you have your Record Book & Orders prior to departing your Permanent Duty Station (PDS).
2. Ensure you have a Government Travel Charge Card (GTCC) or sufficient monetary advances to meet lodging and meal expenses for the first month. Showing up with no GTCC and or advances is the #1 problem experienced by Marines sent TAD to Fort Sill.
3. In most cases "No cost" lodging exists only for entry-level students. Government lodging rates range from $30-$45. For lodging info call # listed above.
4. Government messing is only available for entry-level enlisted students.
5. All Orders should read, "Government quarters directed if available. Messing not available."
6. Reservist, ensure your reserve unit transfers you to active duty. The Marine Detachment, Fort Sill **cannot join** or **pay you** until your Unit Diary Section successfully transfers you to active duty. The latter, along with Marines having no GTCC and or advances is the #1 problem experienced by reservist sent TAD to Fort Sill.

Recently Transferred from Fort Sill to your New PDS:

1. Ensure you complete a travel claim at your new PDS within 3-5 working days.
2. You are welcomed to call me should you have questions about your final travel settlement, but ultimately your local admin center will be responsible for ensuring you get your travel settled properly. We have recently been receiving calls from Marines who have had problems settling their travel claims at their new duty station. Every time we have looked into the matter, we have found that the problems were created because of failure to accomplish simple things, such as completing a travel claim on time or failing to communicate with your DPAC/RAPAC/IPAC/GPAC.
3. If you were issued a GTCC at Fort Sill, ensure your account is transferred to your new command's hierarchy. Checking-in with your GTCC Area Program Coordinator (APC) at your new command should be part of your check-in process.

Field Artillery Officer Basic Course (FAOBC) Students:

1. Colonel Pace (CO Marine Artillery Detachment) encourages you to bring your family to Fort Sill while attending FAOBC. Although you will not rate dependent travel, you will rate Per Diem ($31 a day), Lodging (not to exceed $36 a day), and BAH at the Quantico rate ($1387 for a 2ndLt w/depns) while at Fort Sill, OK. You can also talk to TMO about "Non- Temp Storage" of household goods and a 600 lb ditty move. Also keep in mind that the possibility to obtain a furnished apartment in Lawton is high.

Field Artillery Captains Career Course (FACCC) Students:

1. Colonel Pace (CO Marine Artillery Detachment) encourages you to bring your family to Fort Sill while attending FACCC. Attending FACCC constitutes a Permanent Change of Station (PCS) move. This affects your BAH entitlement. Ensure you read, become familiar with and completely understand guidance provided in MARADMIN 216/04 "Basic Allowance for Housing Waiver for Marines Attending PME and Training".

For further information or clarification on any item above, please contact my staff or myself by using the numbers listed above. ▲TOP

TO SEE A LIST OF ALL COURSES SCHEDULED AT FORT SILL, VISIT THE S3 PAGE ON THE FORT SILL WEBSITE.

http://sill-www.army.mil/usmc/s3

AFTADS OPERATORS COURSE SCHEDULE FY-05

RMKS/1. THE PURPOSE OF THIS MESSAGE IS TO INFORM ALL APPLICABLE UNITS ABOUT THE SEAT AVAILABILITY AND THE NEW COURSE SCHEDULE FOR THE AFATDS OPERATORS COURSE. (CID: A20ANWI) THAT IS TAUGHT AT FORT SILL, OKLAHOMA. THIS COURSE IS NOW TAUGHT IN THREE PHASES. PHASE ONE IS FOR ARMY PERSONNEL ONLY. PHASE TWO COVERS BASIC AFATDS OPERATIONS AT A FIRING BATTERY LEVEL. PHASE THREE BUILDS ON PHASE TWO AND COVERS ALL OTHER BASIC AFATDS OPERATOR FUNCTIONS, TO INCLUDE THE EFFECTS MANAGEMENT TOOL. THESE DATES SUPERCEDE ANY DATES PUBLISHED PREVIOUSLY AND ARE APPLICABLE IMMEDIATELY.

CLASS	PHASE II REPORT	PHASE II END	PHASE III REPORT	PHASE III END	SEATS
001	26 OCT 04	12 NOV 04	15 NOV 04	24 NOV 04	8
002	18 NOV 04	07 DEC 04	08 DEC 04	17 DEC 04	8
003	03 JAN 05	20 JAN 05	21 JAN 05	01 FEB 05	8
004	25 JAN 05	10 FEB 05	11 FEB 05	23 FEB 05	8
005	01 MAR 05	17 MAR 05	18 MAR 05	29 MAR 05	8
006	28 MAR 05	13 APR 05	14 APR 05	25 APR 05	8
007	25 APR 05	11 MAY 05	12 MAY 05	23 MAY 05	8
008	23 MAY 05	09 JUN 05	10 JUN 05	21 JUN 05	8
009	21 JUN 05	08 JUL 05	11 JUL 05	20 JUL 05	8
010	20 JUL 05	05 AUG 05	06 AUG 05	17 AUG 05	8
011	15 AUG 05	31 AUG 05	01 SEP 05	13 SEP 05	8
012	13 SEP 05	29 SEP 05	30 SEP 05	12 OCT 05	8

2. THIS COURSE IS OPEN TO ALL MARINES FROM UNITS THAT WILL RECEIVE AFATDS. THE POINT OF CONTACT FOR THIS COURSE AND OTHER AFATDS MATTERS IS CAPT J. A. MCSHEA, OIC MCFSS, DSN 639-6526, COMM: 580-442-XXXX, EMAIL: JIM.MCSHEA@SILL.ARMY.MIL

3. ADMIN/REPORTING INSTR: GOV QTRS PROV AT COST (EST.) $29.00 - 39.00 PER DAY AND GOV MESS NOT AVAILABLE. ALL STUDENTS WILL NEED TO MAKE THEIR BILLETING RESERVATIONS AT LODGING FACILITY; COMM (580) 442-5000. MARINES REPORTING MUST COME WITH A GOV TRVL CHARGE CARD OR SUFFICIENT PER DIEM ADVANCE FOR ONE MONTH. THERE IS NO LOCAL DISBURSING FACILITY TO SERVICE MARINES AT FORT SILL. ALL MARINES NEED TO REPORT IN WITH THE MARINE CORPS ARTILLERY DETACHMENT, BLDG 759 BROWN HALL, FORT SILL, OK WITH ORDERS. AFTER HOURS CONTACT THE SDNCO AT (580) 442-5615/2467. REQUIRED UNIFORMS: UNIFORM OF THE DAY IS CAMMIES. SEASONAL SERVICE UNIFORM REQ FOR FRIDAYS AND GRADUATIONS. POC FOR ADMIN MATTERS IS GYSGT VILLARREAL AT DSN: 639-6187/6199, COMM: (580)442-6187/6199, OR EMAIL AT JOE.VILLARREAL@SILL.ARMY.MIL. POC FOR QUOTAS IS MSGT BELL AT DSN: 222-4301, COMM: (703) 692-4301, OR EMAIL AT BELLWA@HQMC.USMC.MIL.

TO SEE A LIST OF ALL COURSES SCHEDULED AT FORT SILL, VISIT THE S3 PAGE ON THE FORT SILL WEBSITE.

http://sill-www.army.mil/usmc/s3

Financial Planning

Capt Krohmer, M. R.

A budget is nothing more than a translation of operational requirements into monetary requirements. For many organizations the budget is usually something that is given little studied thought and is often based on what was received last fiscal year (FY). It would make sense for an organization that runs short on funds near the end of the FY to think they need more money to operate during the next FY, but does it?

All budgets are based on a number of different variables, some of which are more concrete than others. Examples include repair parts and field operations, TAD, open purchases, etc.. Bottom line is that a budget request is and should be a comprehensive best estimate based on valid operational requirements.

The main document that guides a budget request is the annual training plan. Historically, most budget requests are due during early summer. Most organizations publish their annual training plan in the late summer to early fall. As a result most budget requests are based on what the unit received last FY with a small plus-up added for good measure. Due to limited resources, our goal in the financial planning process is to estimate a units requirements as close to the actual cost as possible, then transforming these resources into useful and productive training.

The mission and commanders guidance aid in the requirements based budget planning process. The key is a solid performance metric. Five criteria used to evaluate performance in relationship to dollars spent are:

- Meaningful - Does the dollars spent equate to realistic mission oriented training?

- Measurable - Can the facts associated with dollars spent and training accomplishment be identified?

- Aggregetable - Does the training add up for all elements of an organization?

- Auditable - Can the improvements be identified and compared over time?

- Variable - Can the return on investments be identified when comparing competing demands?

Budgeting is a continuous task which enables a staff to improve planning, spending and training. The most important aspects of any budget are mission orientation, setting goals and measured performance.

NAVMC 2664 Financial guidebook for commanders

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Marine Detachment Website

Other Links

___CO___ | ___ XO ___ | __ SgtMaj _

Eagle, Globe & Blockhouse

USMC Arty Regiments

Artillery OAG

Devil Dog Run Info

Safety / ORM

Other Links

____S1 ___ | ___ S3 ___ | ____S4____

AFATDS (MCFSS)

AFATDS NETT

Cannon Crewman (0811)

Director of Combat Development

Directorate Of Training & Doctrine

Enlisted Instruction Section (0844 / 0848)

Fire Support (0861)

HIMARS Test Unit

Marine Battery

Marine Logistics

Officer Instruction

Sheppard AFB

Target Acquisition: RADAR / Met/ Survey

Targeting / IO

Other Links

TECOM, Quantico, VA

Fire Support Systems MARCORSYSCOM

FA Journal

US Army Field Artillery Assoc

Fort Sill Homepage

http://sill-www.army.mil/usmc

USMC Artillery Detachment

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▲TOP

Hail and Farewell

INBOUNDS:

Capt	Lake	20050630	0402
Capt	Noyes	20041115	0802
1stLt	Sargeant	20041115	0802
SSgt	Pruden Jr.	20041210	0811
SSgt	Cox	20050615	2887

OUTBOUNDS:

Maj	Bown	20041130	0802	1NH
GySgt	Evans	20050210	0848	124
SSgt	Locke	TBD		
MSgt	Neace	20041130	0861	(Ret)
Cpl	Erwin	20041108	0121	W51
SSgt	Wallace	20050513	2887	TBD

NEW ARRIVALS:

CWO3	Rivera	20040930	0170
Capt	Washington	20040801	0802
1stLt	Brown	20041031	0802
1stLt	Laxton	20041031	0802
GySgt	Cuomo	20040816	0861
GySgt	Foster	20040726	2087
GySgt	Howe	20040901	0844
SSgt	Hall	20040702	0811
SSgt	Hill	20040722	0811
Sgt	Hader	20040718	0844

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